

5777992



FIG. 1a

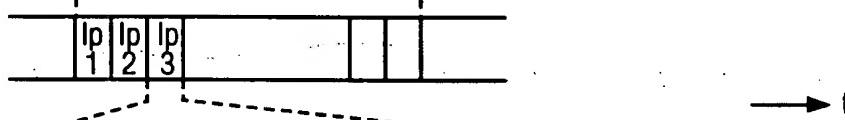


FIG. 1b

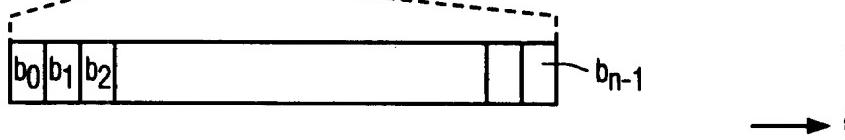


FIG. 1c

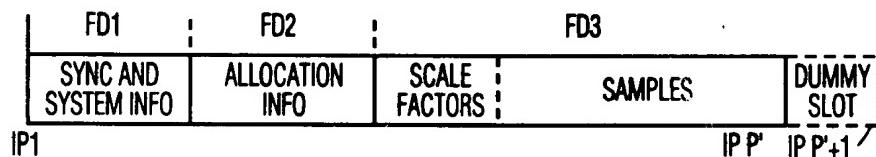


FIG. 2

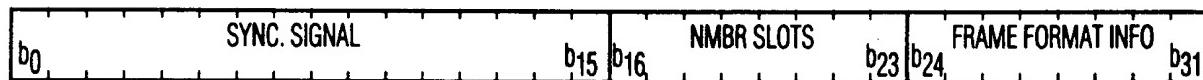


FIG. 3

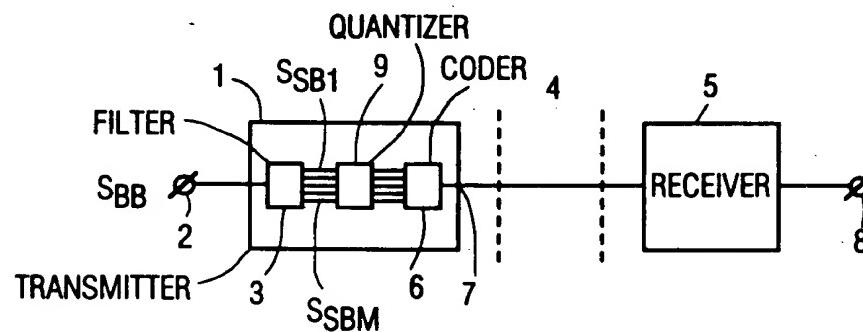


FIG. 4

APPROVED	J.G. FIG.
BY	
DRAFTSMAN	CLASS SUBCLASS

BR bitrate (kbits/s)	Fs sample freq. (kHz)	B # slots in a frame
128	32	48
	44.1	34 + padding
	48	32
192	32	72
	44.1	52 + padding
	48	48
256	32	96
	44.1	69 + padding
	48	64
384	32	144
	44.1	104 + padding
	48	96

FIG. 5

bitrate (kbits/s)	total # frames in padding sequence	# frames with a dummy slot
128	147	122
192	49	12
256	147	97
384	49	24

FIG. 6

APPROVED	Q.C. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN:	

Bit 24 :	Frame type	0	format A
		1	format B
Bits 25 and 26: Copyright		0 0	no copyright, own rec.
		0 1	no copyright, software
		1 0	copyright, own recording
		1 1	copyright, software
Bits 27 - 31 : Mode indication			

		Sample Freq.	Emphasis
0 0 0 0 0	Stereo	48 kHz	no emphasis
0 0 0 0 1	Stereo	48 kHz	50/15 μ sec
0 0 0 1 0	Stereo	44.1 kHz	no emphasis
0 0 0 1 1	Stereo	44.1 kHz	50/15 μ sec
0 0 1 0 0	Stereo	32 kHz	no emphasis
0 0 1 0 1	Stereo	32 kHz	50/15 μ sec
0 0 1 1 0		reserved	
0 0 1 1 1		reserved	
0 1 0 0 0	2 Chan.	48 kHz	no emphasis
0 1 0 0 1	2 Chan.	48 kHz	50/15 μ sec
0 1 0 1 0	2 Chan.	44.1 kHz	no emphasis
0 1 0 1 1	2 Chan.	44.1 kHz	50/15 μ sec
0 1 1 0 0	2 Chan.	32 kHz	no emphasis
0 1 1 0 1	2 Chan.	32 kHz	50/15 μ sec
0 1 1 1 0		reserved	
0 1 1 1 1		reserved	
1 0 0 0 0	1 Chan.	48 kHz	no emphasis
1 0 0 0 1	1 Chan.	48 kHz	50/15 μ sec
1 0 0 1 0	1 Chan.	44.1 kHz	no emphasis
1 0 0 1 1	1 Chan.	44.1 kHz	50/15 μ sec
1 0 1 0 0	1 Chan.	32 kHz	no emphasis
1 0 1 0 1	1 Chan.	32 kHz	50/15 μ sec
1 0 1 1 0		reserved	
1 0 1 1 1	1 Chan.	48 kHz	CCITT J.17
1 1 0 0 0	Stereo	48 kHz	CCITT J.17
1 1 0 0 1	2 Chan.	48 kHz	CCITT J.17
1 1 0 1 0	Stereo	44.1 kHz	CCITT J.17
1 1 0 1 1	2 Chan.	44.1 kHz	CCITT J.17
1 1 1 0 0	Stereo	32 kHz	CCITT J.17
1 1 1 0 1	2 Chan.	32 kHz	CCITT J.17
1 1 1 1 0	1 Chan.	32 kHz	CCITT J.17
1 1 1 1 1	1 Chan.	44.1 kHz	CCITT J.17

FIG. 7

mode	channel I	channel II
stereo	left	right
2 channel mono	program I	program II
1 channel mono	program I	not used

FIG. 8

APPROVED	J.E. FIG.
BY	
DRAFTSMAN	

allocation info	length of samples in bits	
0000	-	(no samples or scale factors transferred)
0001	2	
0010	3	
0011	4	
0100	5	
0101	6	
0110	7	
0111	8	
1000	9	
1001	10	
1010	11	
1011	12	
1100	13	
1101	14	
1110	15	
1111		not used to prevent incorrect sync detection

FIG.9

slot 2:	I-1	II-1	I-2	II-2	I-3	II-3	I-4	II-4
slot 3:	I-5	II-5	I-6	II-6	I-7	II-7	I-8	II-8
slot 4:	I-9	II-9	I-10	II-10	I-11	II-11	I-12	II-12
slot 5:	I-13	II-13	I-14	II-14	I-15	II-15	I-16	II-16
slot 6:	I-17	II-17	I-18	II-18	I-19	II-19	I-20	II-20
slot 7:	I-21	II-21	I-22	II-22	I-23	II-23	I-24	II-24
slot 8:	I-25	II-25	I-26	II-26	I-27	II-27	I-28	II-28
slot 9:	I-29	II-29	I-30	II-30	I-31	II-31	I-32	II-32

FIG.10

slot 2:	I-1	II-1	I-2	II-2	I-3	II-3	I-4	II-4
slot 3:	I-5	II-5	I-6	II-6	I-7	II-7	I-8	II-8
slot 4:	I-9	II-9	I-10	II-10	I-11	II-11	I-12	II-12
slot 5:	I-13	II-13	I-14	II-14	I-15	II-15	I-16	II-16

FIG.11

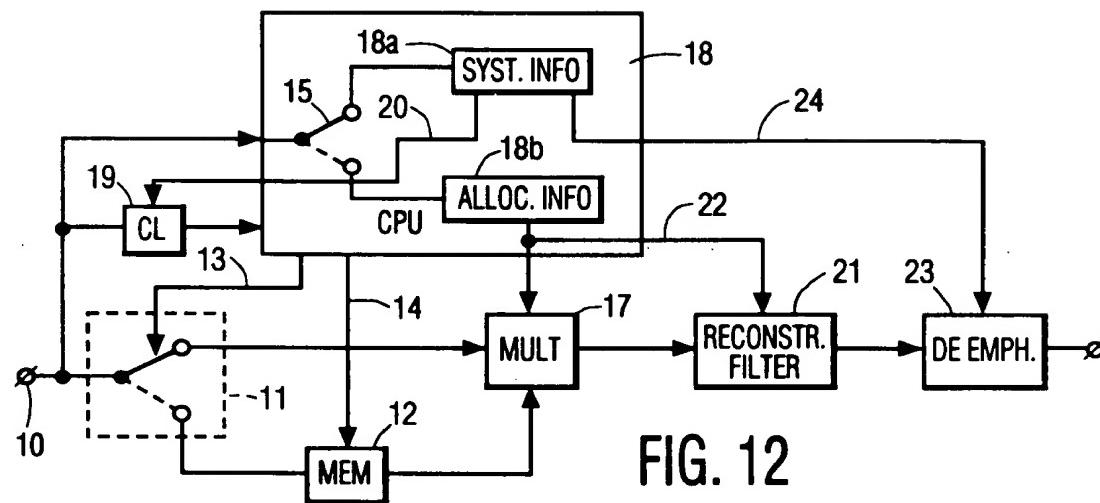


FIG. 12

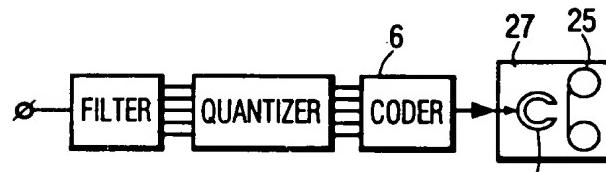


FIG. 13

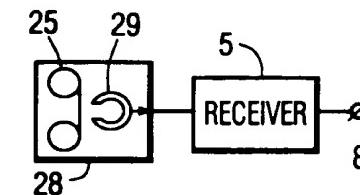


FIG. 14



FIG. 15a



FIG. 15b



FIG. 15c

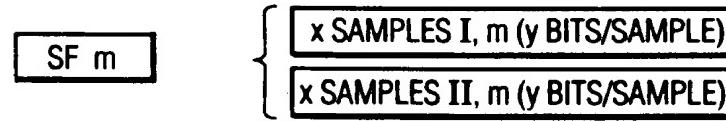


FIG. 15d

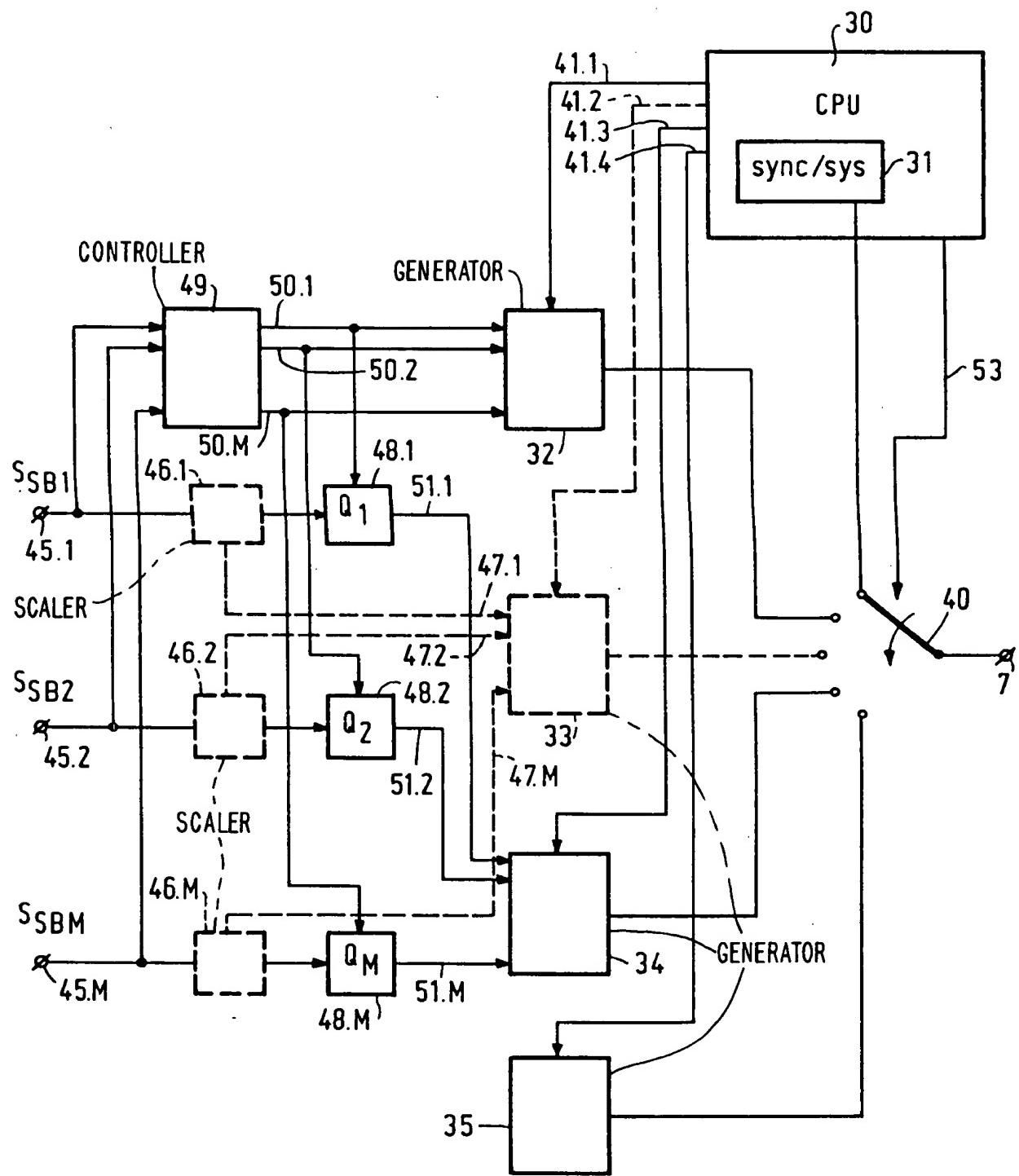


FIG.16

APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

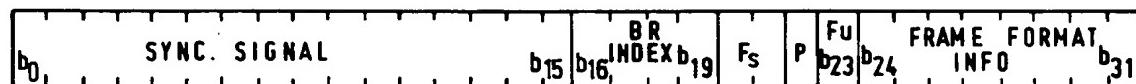


FIG.17

Bits 16 to 19 : bitrate index

bitrate (kbits/ sec.)	index	sample frequency		# slots	# slots	# slots
		48 kHz	44.1 kHz			
32	1	8		8		12
64	2	16		17		24
96	3	24		26		36
128	4	32		34		48
160	5	40		43		60
192	6	48		52		72
224	7	56		60		84
256	8	64		69		96
288	9	72		78		108
320	10	80		87		120
352	11	88		95		132
384	12	96		104		144
416	13	104		113		156
448	14	112		121		168
+ padding						

Bits 20 and 21 : Sample Frequency

0 0	44.1 kHz
0 1	48 kHz
1 0	32 kHz
1 1	reserved

Bit 22 : padding bit

'1' if the frame contains a 'dummy' slot, Otherwise '0'

Bit 23 : Future Use

reserved for future use,
'0' for the time being.

FIG.18

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



FIG. 19

Bits 24 and 25 : Mode indication

0	0	stereo
0	1	intensity stereo
1	0	bilingual
1	1	mono

Bits 26 and 27 : Intensity stereo mode switches :

0 0 subbands 5 - 32 in intensity stereo mode
0 1 subbands 9 - 32 in intensity stereo mode
1 0 subbands 13 - 32 in intensity stereo mode
1 1 subbands 17 - 32 in intensity stereo mode

Bit 28 : Copyright

0 no copyright
1 copyright protected

Bit 29 : Original/Home Copy

0 Copy
1 Original

Bits 30 and 31 : Emphasis

0 0	no emphasis
0 1	50/15 μ sec emphasis
1 0	reserved
1 1	CCITT J.17

FIG. 20

Mono mode :

M = mono signal

slot 2:

M-1 M-2 M-3 M-4 M-5 M-6 M-7 M-8

slot 3:

M-9 M-10 M-11 M-12 M-13 M-14 M-15 M-16

slot 4:

M-17 M-18 M-19 M-20 M-21 M-22 M-23 M-24

FIG 21

APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

Intensity Stereo mode :

L = left channel, R = right channel, M = mono signal

Switch bits (bits 26 and 27) are 0 0 :

slot 2:

L-1	R-1	L-2	R-2	L-3	R-3	L-4	R-4
-----	-----	-----	-----	-----	-----	-----	-----

slot 3:

M-5	M-6	M-7	M-8	M-9	M-10	M-11	M-12
-----	-----	-----	-----	-----	------	------	------

slot 4:

M-13	M-14	M-15	M-16	M-17	M-18	M-19	M-20
------	------	------	------	------	------	------	------

slot 5:

M-21	M-22	M-23	M-24	M-25	M-26	M-27	M-28
------	------	------	------	------	------	------	------

slot 6:

M-29	M-30	M-31	M-32
------	------	------	------

FIG. 22a

Switch bits are 0 1 :

slot 2:

L-1	R-1	L-2	R-2	L-3	R-3	L-4	R-4
-----	-----	-----	-----	-----	-----	-----	-----

slot 3:

L-5	R-5	L-6	R-6	L-7	R-7	L-8	R-8
-----	-----	-----	-----	-----	-----	-----	-----

slot 4:

M-9	M-10	M-11	M-12	M-13	M-14	M-15	M-16
-----	------	------	------	------	------	------	------

slot 5:

M-17	M-18	M-19	M-20	M-21	M-22	M-23	M-24
------	------	------	------	------	------	------	------

slot 6:

M-25	M-26	M-27	M-28	M-29	M-30	M-31	M-32
------	------	------	------	------	------	------	------

FIG. 22b

Switch bits are 1 0 :

slot 2:

L-1	R-1	L-2	R-2	L-3	R-3	L-4	R-4
-----	-----	-----	-----	-----	-----	-----	-----

slot 3:

L-5	R-5	L-6	R-6	L-7	R-7	L-8	R-8
-----	-----	-----	-----	-----	-----	-----	-----

slot 4:

L-9	R-9	L-10	R-10	L-11	R-11	L-12	R-12
-----	-----	------	------	------	------	------	------

slot 5:

M-13	M-14	M-15	M-16	M-17	M-18	M-19	M-20
------	------	------	------	------	------	------	------

slot 6:

M-21	M-22	M-23	M-24	M-25	M-26	M-27	M-28
------	------	------	------	------	------	------	------

slot 7:

M-29	M-30	M-31	M-32
------	------	------	------

FIG. 22c

Switch bits are 1 1 :

slot 2:

L-1	R-1	L-2	R-2	L-3	R-3	L-4	R-4
-----	-----	-----	-----	-----	-----	-----	-----

slot 3:

L-5	R-5	L-6	R-6	L-7	R-7	L-8	R-8
-----	-----	-----	-----	-----	-----	-----	-----

slot 4:

L-9	R-9	L-10	R-10	L-11	R-11	L-12	R-12
-----	-----	------	------	------	------	------	------

slot 5:

L-13	R-13	L-14	R-14	L-15	R-15	L-16	R-16
------	------	------	------	------	------	------	------

slot 6:

M-17	M-18	M-19	M-20	M-21	M-22	M-23	M-24
------	------	------	------	------	------	------	------

slot 7:

M-25	M-26	M-27	M-28	M-29	M-30	M-31	M-32
------	------	------	------	------	------	------	------

FIG. 22d

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

FIG. 23

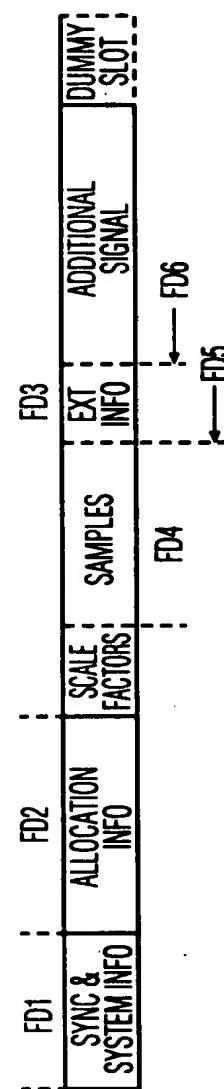
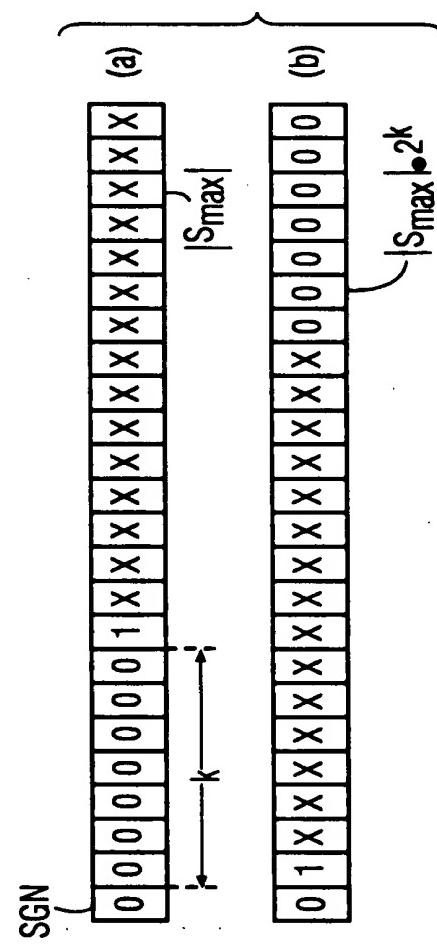


FIG 24



APPROVED **O.G. FIG.**
 BY
 CLASS SUBCLASS
 DRAFTSMAN

s'	s'	TRUNCATED	
+1	0.75	011	110
0.71	0.50	010	101
0.42	0.25	001	100
0.14	0	000	011
-0.14	-0.25	111	010
-0.42	-0.50	110	001
-0.71	-0.75	101	000
-1	-1	100	

(a)

(b)

(c)

(d)

FIG. 25

		s'	s'
110	010	0.50	0.857
101	001	0.25	0.571
100	000	0.00	0.287
011	111	-0.25	0.00
010	110	-0.50	-0.287
001	101	-0.75	-0.571
000	100	-1.00	-0.857

(a)

(b)

(c)

(d)

FIG. 26